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10/684,611	10/14/2003	Frank E. Semersky	I-36691	2924

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MACMILLAN SOBANSKI & TODD, LLC
ONE MARITIME PLAZA FIFTH FLOOR
720 WATER STREET
TOLEDO, OH 43604-1619

EXAMINER

VO, HAI

ART UNIT PAPER NUMBER

1771

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/684,611
Filing Date: October 14, 2003
Appellant(s): SEMERSKY, FRANK E.

Donald R. Fraser
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 05/18/2006 appealing from the Office action mailed 12/01/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

ISSUE VI:

Whether Claims 18-21 and 25 are unpatentable over Hayes in view of US Patent No. 3,684,633 to Haase.

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. Rejections of claims 8 and 9

under 35 USC 112, second paragraph have been overcome in view of the argument I set forth at page 4 of the Appeal Brief.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,485,819	HAYES	11-2002
5,919,547	KOCHER et al	07-1999
5,149,579	PARK et al	9-1992
3,684,633	HAASE	8-1972

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-2, 5, 8-13, 16-19 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Park et al (US 5,149,579).

Park teaches a container comprising a polypropylene skin layer, polypropylene foam layer, a functional layer and a polypropylene foam layer (column 8, lines 30-60). Park uses carbon dioxide as a blowing agent to form the foam (column 10, lines 45-46), therefore, it is not seen that the foam cells could not have contained carbon dioxide. The skin and the foam layer are made from the same polypropylene. The foam layer and the functional layer are made from different materials. Accordingly, it is the examiner's position that Park anticipates the claimed subject matter.

Claims 1-11, 22, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayes et al (US 6,485,819).

Hayes teaches a laminate film for use in containers comprising a polyethylene terephthalate (PET) film layer and a copolyester film layer (column 9, lines 61 et seq.). The layer of copolyester is foamed by using carbon dioxide as a blowing agent (column 15, lines 35-40). Therefore, it is the examiner's position that the foam cells would have contained carbon dioxide. Since the foam and the film contain polyethylene terephthalate, they are made from "the same polyethylene terephthalate". The isosorbide polyester renders the foam layer chemically different from the PET film layer. Accordingly, it is the examiner's position that Hayes anticipates the claimed subject matter.

Claims 3, 4, 6, 7, 14, 15, 20, 21, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al (US 5,149,579) as applied to claim 1 above, further in view of Hayes et al (US 6,485,819).

Park teaches a container comprising polypropylene film layer, a functional layer and a polypropylene foam layer (column 8, lines 30-60). Park does not teach a container comprising a foam layer and a film layer, each made from a polyethylene terephthalate. Hayes, however, teaches a multilayer laminate for use in food packaging comprising a foam layer made from a copolyester that exhibit an improved rate of biodegradation more amenable to solid waste disposal (column 1, lines 5-10). Hayes also teaches a multilayer laminate for use in food packaging wherein a polymeric film can be made from a blend of poly(ethylene terephthalate) with olefins to form multilayer films with improved water vapor resistance (column 9, lines 60-65; column 10, lines 1-3). Therefore, it would have been obvious to one having ordinary skill in the art at the

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time the invention was made to substitute a copolyester foam for the polypropylene foam layer motivated by the desire to provide the container with higher biodegradation rate and higher thermal resistance. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the poly(ethylene terephthalate) with polypropylene to form a film layer of the Park Patent motivated by the desire to provide the container having improved water vapor resistance (column 9, lines 60-65).

Park teaches a container comprising a non-foamed polypropylene skin layer, polypropylene foam layer, a functional layer (column 8, lines 30-60). Park does not specifically disclose the functional layer made from PET. Hayes, however, teaches a food container comprising a layer of copolyester suitable as a gas barrier (column 8, lines 7-8). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use copolyester as the functional layer of Park because copolyester is shown to be a good oxygen barrier and further the use of copolyester provides the container with higher biodegradation rate and higher thermal properties.

Claims 12-17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes et al (US 6,485,819) as applied to claim 1 above, further in view of Park et al (US 5,149,579).

Hayes teaches a food container comprising a copolyester foam layer. Hayes does not teach a food container comprising two foam layers and a functional layer sandwich between the foam layers. Park teaches a food container comprising two

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foam layers and a functional layer sandwich between the foam layers. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form a food container comprising a functional layer sandwiched between two copolyester foam layers to provide a container with a water vapor or air barrier, thereby extending the shelf-life of an oxygen-sensitive product containing therein (Park, column 8, lines 50-57).

Claims 18-21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes et al (US 6,485,819) as applied to claim 1 above, further in view of Haase (US 3,684,633).

Hayes teaches a laminate film for use in containers comprising a film layer and a layer of copolyester (column 9, lines 61 et seq.). The layer of copolyester is foamed by using carbon dioxide as a blowing agent (column 15, lines 35-40). The laminate may have five layers joined together by heat (column 10, lines 5-10). The film layer can be made from PET, polyethylene, polyethylene sulfide, or polyimide (column 10, lines 1-10). Accordingly, the laminate film comprises one foam layer made from copolyester and other four film layers formed from PET, polyethylene, polyethylene sulfide, or polyimide. Hayes does not specifically disclose the order of the film layer, the foam layer in the laminate to meet the structural limitations as recited in the claims. Haase, however, teaches a dinner plate comprising a polystyrene foam layer sandwiched between the polystyrene film layers. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form a food container having a copolyester foam layer sandwiched between the PET film layers

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because such a structure is known in the food packaging art and Haase provides necessary detail to practice the invention of Hayes.

Claims 1- 11, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kocher et al (US 5,919,547) further in view of Hayes et al (US 6,485,819).

Kocher teaches a food container comprising a support member 12, a sealant layer (column 10, lines 30-60). The support member and a sealant layer are made of a polyethylene terephthalate resin. Hence, they are the same. The support member is polyolefin foam whereas the sealant layer is made from polyethylene terephthalate. Therefore, they are different. Kocher does not teach the use of carbon dioxide to form the foamed support member. Hayes, however, teaches the food container comprising a foam layer of copolyester using carbon dioxide as a blowing agent. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use carbon dioxide as a blowing agent to generate the foam cells in the support member because such is known in the foam art and Hayes provides necessary details to practice the invention of Kocher.

(10) Response to Argument

Examiner's comments regarding Appellant's Argument II

Appellant argues that the Park foam sheet uses a carbon dioxide foaming agent for controlling the density of the foam only, Park does not disclose a plastic layer "wherein the foam cells contain carbon dioxide". The examiner respectfully disagrees. It has been known in the foam art that if the carbon dioxide is used as a blowing agent,

some of the carbon dioxide will remain in the cells of the foam. Even the foam sheet is "aged for a period of time to allow for diffusion of the blowing agent and air through the cell walls", the foam cells still contains the carbon dioxide because ambient air from the atmosphere ordinarily includes a certain amount of water vapor and minor amounts of carbon dioxide.

Examiner's comments regarding Appellant's Argument III

Appellant argues that Hayes does not disclose a plastic layer "wherein the foam cells contain carbon dioxide". The examiner respectfully disagrees. It has been known in the foam art that if the carbon dioxide is used as a blowing agent, some of the carbon dioxide will remain in the cells of the foam. Accordingly, the art rejections are sustained.

Examiner's comments regarding Appellant's Argument IV-VI

Appellant argues that Park does not disclose a plastic layer "wherein the foam cells contain carbon dioxide". The examiner has provided a detailed analysis as to why the claimed invention is not patentable in view of the Park Patent. The examiner incorporates those arguments by reference. Appellant argues that there is no motivation to combine the multilayer container of Park with the laminate having the increased biodegradation rate and thermal properties of Hayes because "Hayes does not disclose multilayer films comprised of identical materials or materials with similar biodegradation characteristics, in any manner". The arguments are not quite understood and therefore not found persuasive for patentability. Park does not teach a container comprising a foam layer and a film layer, each made from a polyethylene

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terephthalate. Hayes, however, teaches a multilayer laminate for use in food packaging comprising a foam layer made from a copolyester that exhibit an improved rate of biodegradation more amendable to solid waste disposal and higher thermal resistance (column 1, lines 5-10, column 2, lines 25-27). Hayes also teaches a multilayer laminate for use in food packaging wherein a polymeric film can be made from a blend of poly(ethylene terephthalate) with olefins to form multilayer films with improved water vapor resistance (column 9, lines 60-65; column 10, lines 1-3). In view of the teachings of Hayes, it would have been obvious to make a multilayer film comprising a foam layer, a film layer, each made from a copolyester, olefins and combination thereof. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute a copolyester foam for the polypropylene foam layer motivated by the desire to provide the container with higher biodegradation rate and higher thermal resistance. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the poly(ethylene terephthalate) with polypropylene to form a film layer of the Park Patent motivated by the desire to provide the container having improved water vapor resistance (column 9, lines 60-65).

Appellant has reiterated positions that Hayes does not teach the foam cells containing carbon dioxide, the combination of Hayes and Hasse as well as the combination of Krocher and Hayes do not achieve the claimed invention. The examiner has provided an explanation as to why Hayes discloses the foam cells containing

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carbon dioxide. The examiner incorporates the arguments by reference. Accordingly, the art rejections are sustained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

HV

Hai Vo

**HAI VO
PRIMARY EXAMINER**

Conferees:

Terrel Morris, SPE AU 1771

Terrel Morris

Carol Chaney, SPE AU 1773

Carol Chaney